

UNITED STATES DEPARTMENT OF COMMERCE **Patent and Trademark Office**

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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. US/ 760.9UI U1/U//3/ 004900-148 1051/0612 **EXAMINER** BURNS DOANE SWECKER AND MATHIS HENDRICKSON, S GEORGE MASON BUILDING **ART UNIT**

WASHINGTON AND PRINCE STREETS P O BUX 1404 ALEXANDRIA VA 22313-1404

PAPER NUMBER 1754

DATE MAILED:

06/12/98

Please find below and/or attached an Office communication concerning this application or pr ceeding.

Commissioner of Patents and Trademarks

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Office Action Summary	Application No. 90	Applicant(s)		
	Examiner	1 101	Group Art Unit	
—The MAILING DATE of this communication appears	on the cover sheet b	eneath the co	orrespondence address	
P riod for Response				
A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SE MAILING DATE OF THIS COMMUNICATION.	T TO EXPIRE 3	MONTH	H(S) FROM THE	
 Extensions of time may be available under the provisions of 37 CFR 1.1 from the mailing date of this communication. If the period for response specified above is less than thirty (30) days, a If NO period for response is specified above, such period shall, by defau Failure to respond within the set or extended period for response will, by 	response within the statuto	ry minimum of thi	irty (30) days will be considered timely.	
Status			(44 416.6. 3 166).	
☐ Responsive to communication(s) filed on				
This action is FINAL.			•	
 Since this application is in condition for allowance except fo accordance with the practice under Ex parte Quayle, 1935 (r formal matters, prose C.D. 1 1; 453 O.G. 213.	cution as to t	he merits is closed in	
Disp sition of Claims				
De Claim(s) 22-46		is/are no	anding in the application	
Of the above claim(s) is/are pending in the application is/are withdrawn from consider			thorough from application.	
□ Claim(s)				
Claim(s)12-46	is/are anowey.			
□ Claim(s)	,	is/are rej	ected.	
□ Claim(s)	is/are objected to.			
Application Papers			requirement.	
☐ See the attached Notice of Draftsperson's Patent Drawing Re	eview PTO-948			
☐ The proposed drawing correction, filed on	is □approved □	disapproved		
is/are objected	to by the Examiner.			
 The specification is objected to by the Examiner. 				
\square The oath or declaration is objected to by the Examiner.				
Pri rity under 35 U.S.C. § 119 (a)-(d)				
 □ Acknowledgment is made of a claim for foreign priority under □ All □ Some* □ None of the CERTIFIED copies of the preceived. 	oriority documents have	e been		
 □ received in Application No. (Series Code/Serial Number)_ □ received in this national stage application from the Internat 	ional Bureau (PCT Rul	e 1 7 2(a))	·	
*Certified copies not received:				
Attachment(s)			 ·	
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s).	□ Inter	niew Summen	V DTO 440	
□ Notice of References Cited, PTO-892		☐ Interview Summary, PTO-413☐ Notice of Informal Patent Application, PTO-152		
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948			Patent Application, PTO-152	
Office Act	i n Summary			

U. S. Patent and Trademark Office PTO-326 (Rev. 3-97) Art Unit: 1754

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 29 and 31-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a) In claim 39, "which ... is" is awkward and should be "having ... of".
- b) Claim 29 is unclear as to how a "filter cake" can be present in a suspension.
- c) In claim 39, "if appropriate" is unclear as to the basis for determining it.
- d)The steps of claims 31 and 39 do not appear to agree with the preambles; the effluent of claim 31 step C will apparently yield a solid. A further step of adding water appears necessary (see claims 38 and 41), or perhaps "dissolving" is intended for "deagglomerating".

Claims 22-37 and 39-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chevallier et al. '570.

Chevallier teaches in col. 2 lines 35-45, col. 4 line 20-col. 5 line 25, col. 11 lines 5-20 and col. 22 lines 1-10 reacting silicate and acid (and optionally alumina) in the claimed concentrations, then adding more silicate and acid together to pH 4-6, filtering, ultrasonic deagglomeration and adding water to make a 4% silica solution.

Concernning claim 39, a quantity is not patentably distinct from "less than" that quantity; see Titanium Metals v. Banner 227 USPQ 773.

Chevallier differs in silica concentration of final product, however suggests that a concentration of about 20% is desirable.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to form a silica product in the process of Chevallier having the claimed silica content because doing so makes a concentrated solution which is easy to handle, ship and use efficiently.

Concerning claims 34, 35, 42 and 43, the examiner takes Official Notice that the claimed crumbling is old and known in the art; using them is an obvious expedient to perform the deagglomeration taught by Chevallier.

Claim 36 is met when the process is repeated upon a 'heel' portion.

Claims 38 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chevallier et al. '570 as applied to claims 22-37 and 39-45 above, and further in view of Cox et al. Chevallier does not teach washing with organic solvent, however Cox teaches doing so in col. 4 lines 25-40.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to wash the product of Chevallier with organic solvent suggested by Cox because doing so makes a pure material desired by Chevallier.

Applicant's arguments filed 4/8/98 have been fully considered but they are not persuasive. The corrections intended have not been made to all the claims. Concerning "if appropriate", the term does not have the normal meaning of "if possible" which applicants apparently ascribe to it. Merely that it is possible to add a reagent does not mean that it is appropriate to do so. Concerning Chevallier, no patentable distinction in the size of claim 39 is seen, as explained. No differences in the viscosity have been shown. WO '330 is withdrawn.

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (703) 308-2539.

MICHAEL L LEWIS

SUPERVISORY PATENT EXAMINER PATENT EXAMINING GROUP 1700